FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Amcast Automotive - Gas City Plant
6231 East 500 South
Marion, Indiana 46953

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F053-12972-00046	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: Expiration Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary aluminum die cast facility.

Authorized Individual:	Gary J. Lyman, Corporate Environmental Engineer
Source Address:	6231 East 500 South, Marion, IN 46953
Mailing Address:	6231 East 500 South, Marion, IN 46953
SIC Code:	3363
Source Location Status:	Grant
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) natural gas-fired wash line boiler, identified as B-1, constructed in 1992, with a maximum heat input rate of 10.5 million (MM) British thermal units (Btu) per hour;

(b) One (1) liquid paint booth, identified as LP-1, using sixteen (16) LPHV air atomization guns, coating a maximum of 320 aluminum wheels per hour, using dry filters for particulate matter overspray control;

(c) One (1) natural gas-fired reverberatory furnace identified as REV-1, with a maximum heat input rate of 5.5 MMBtu per hour, with a maximum capacity of melting 3,500 pounds of aluminum per hour; using a natural gas-fired fume incinerator for control, exhausting to one (1) stack identified as FI;

(d) One (1) natural gas-fired reverberatory furnace identified as REV-2, with a maximum heat input rate of 10 MMBtu per hour, with a maximum capacity of melting 4,000 pounds of aluminum per hour, exhausting to one (1) stack identified as REV-2;

(e) One (1) shot blasting unit with a maximum process weight rate of 1000 pounds per hour (identified as wheelabrator), utilizing a baghouse for particulate matter (PM) control.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) One (1) natural gas-fired dry-off oven (clear), identified as PPDO-1, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through one (1) stack identified as PPDO-1;

(b) One (1) natural gas-fired dry-off oven (color), identified as PPDO-2, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through one (1) stack identified as PPDO-2;

(c) One (1) natural gas-fired bake oven (clear), identified as PPCO-1, with a maximum heat input rate of 3.6 MMBtu per hour, exhausting through one (1) stack identified as PPCO-1;

(d) One (1) natural gas-fired bake oven (color), identified as PPCO-2, with a maximum heat input rate of 3.6 MMBtu per hour, exhausting through one (1) stack identified as PPCO-2;

(e) One (1) natural gas-fired Pyrolysis furnace;

(f) Five (5) natural gas-fired air make-up units, identified as AMU-1 - AMU-3, AMU-5 and AMU-6, each with a maximum heat input rate of 4.125 MMBtu per hour;

(g) One (1) natural gas-fired air make-up unit, identified as AMU-4, with a maximum heat input rate of 9.9 MMBtu per hour;

(h) Two (2) natural gas-fired air make-up units, identified as AMU-7 and AMU-8, each with a maximum heat input rate of 4.9 MMBtu per hour ;

(i) One (1) natural gas-fired air make-up unit, identified as AMU-11, with a maximum heat input rate of 2.1 MMBtu per hour;

(j) One (1) natural gas-fired jet melt furnace identified as JM-1, with a maximum heat input rate of 3.2 MMBtu per hour;

(k) Two (2) natural gas-fired filter furnaces identified as FF-1 and FF-2, each with a maximum heat input rate of 2.0 MMBtu per hour;

(l) Thirty (30) electric casting machines;

(m) One (1) natural gas-fired material preheat oven, identified as PO-1, with a maximum heat input rate of 1.2 MMBtu per hour;

(n) One (1) natural gas-fired heat treat in line oven, identified as HT-1, with a maximum heat input rate of 4.6 MMBtu per hour, exhausting to one (1) stack identified as HT-1;

(o) Two (2) natural gas-fired age oven in line, identified as AO-1 and AO-2, each with a maximum heat input rate of 1.0 MMBtu per hour, exhausting to one (1) stack identified as AO-1;

(p) One (1) natural gas-fired caustic tank heater, identified as CT-1, with a maximum heat input rate of 0.4 MMBtu per hour, and exhausting to one (1) stack identified as CT-1;

(q) Three (3) natural gas-fired drop bottom heat treat oven, identified as #2 - #4, each with a maximum heat input rate of 7.5 MMBtu per hour;

(r) Ten (10) natural gas-fired HVAC units, identified as #1 - #10, with a combined maximum heat input rate of 0.125 MMBtu per hour;

(s) One (1) die prep oven, with a maximum heat input rate of 0.8 MMBtu per hour;

(t) One (1) hot cyclone chip dryer, identified as HC-1, with a maximum heat input rate of 0.5 MMBtu per hour, exhausting to one (1) stack identified as HC-1; and

(u) Four heat treat quench tank heaters, identified as QTH1-4, each with a maximum heat input rate of 1.2 MMBtu per hour.

(v) One (1) natural gas-fired preheating oven, identified as PH-1, with a maximum heat input rate of 1.59 MMBtu per hour;

(w) One (1) natural gas-fired two zone cure oven, identified as CO-1, with maximum heat input rates of 4.0 and 1.5 MMBtu per hour for a maximum total capacity of 5.5 MMBtu/hr;

(x) Two (2) electric IR units, identified as IR-1 & 2, with a combined maximum heat input rate of 2.4 MMBtu/hr.

(y) One (1) pouring/casting operation with a maximum capacity of 1.5 tons of aluminum per hour.

(z) One (1) casting cleaning/chipper operation with a maximum capacity of 1.5 tons of aluminum per hour.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)

or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to

correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in

accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be

accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon reques. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and ~~is~~ comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance

Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(a) One (1) natural gas-fired wash line boiler, identified as B-1, constructed in 1992, with a maximum heat input rate of 10.5 million (MM) British thermal units (Btu) per hour.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to the New Source Performance Standards, 326 IAC 12, and 40 CFR 60.40c through 60.48c, Subpart Dc, the Permittee is subject only to the record keeping and reporting requirements under 40 CFR 60.48c (a) and (g).

D.1.2 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), the one (1) natural gas-fired wash line boiler (identified as B-1) shall be limited to 0.59 pounds PM per MMBtu. The limit is based on the following equation:

$Pt = 1.09/Q^{0.26}$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 10.5 MMBtu/hr

D.1.3 FESOP PM10 limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), PM10 shall not exceed 0.0076 pounds of PM10 per MMBtu of heat input for boiler B-1 (equivalent to 0.35 tons per year).

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) natural gas-fired wash line boiler, identified as B-1.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirements

(a) One (1) boiler (ID # B-1), which only combusts natural gas, shall comply with the record keeping and reporting requirements under 40 CFR 60.48c (a) and (g). This source has complied with the notification requirements under 40 CFR 60.48c (a). The applicable record keeping requirements are as follows:

(1) The Permittee shall record and maintain records of the amounts of each fuel combusted during each day.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.6 Reporting Requirements

The natural gas boiler certification shall be submitted semi-annually to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being

reported. The natural gas-fired boiler certification does require the certification by the Aresponsible official@ as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(b) One (1) liquid paint booth, identified as LP-1, using sixteen (16) LPHV air atomization guns, coating a maximum of 320 aluminum wheels per hour, using dry filters for particulate matter overspray control.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal parts or products in the liquid paint booth (LP-1) shall be limited to 3.5 pounds of VOC per gallon of coating less water delivered to the applicator, for air dried, forced warm air dried, or extreme performance coatings.

Solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.2.2 FESOP Limit [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the single HAP and total HAPs input to the liquid paint booth (LP-1) shall not exceed 10 tons and 25 tons per twelve (12) consecutive month period, rolled on a monthly basis, respectively. This will limit source wide single HAP and total HAP emissions to less than 10 and 25 tons per year, respectively. Therefore the requirements of 326 IAC 2-7 do not apply.

D.2.3 Particulate Matter (PM) [40 CFR 52 Subpart P]

Pursuant to 40 CFR 52 Subpart P, the PM from the liquid paint booth (LP-1) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.2.5 Hazardous Air Pollutants (HAPs)

Compliance with the HAP content and usage limitations contained in Condition D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.6 HAP Emissions

Compliance with Condition D.2.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.2.7 Particulate [326 IAC 6-3-2)d)]

Pursuant to 326 IAC 6-3-2(d) and in order to comply with D.2.3, the dry filters for particulate control shall be in operation in accordance with manufacturer's specifications and control emissions from the liquid paint booth (LP-1) at all times when the liquid paint booth (LP-1) is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.8 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the liquid paint booth stack while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.9 Record Keeping Requirements

(a) To document compliance with Conditions D.2.2 and D.2.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits in Condition D.2.2 and the VOC emission limits established in Condition D.2.1.

(1) The amount and content of VOC and HAP for each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The volume weighted VOC and HAP content of the coatings used for each month;

(4) The cleanup solvent usage for each month;

(5) The total HAP usage for each month; and

(6) The weight of HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(c) One (1) natural gas-fired reverberatory furnace identified as REV-1, with a maximum heat input rate of 5.5 MMBtu per hour, with a maximum capacity of melting 3,500 pounds of aluminum per hour; using a natural gas-fired fume incinerator for control, exhausting to one (1) stack identified as FI; and

(d) One (1) natural gas-fired reverberatory furnace identified as REV-2, with a maximum heat input rate of 10 MMBtu per hour, with a maximum capacity of melting 4,000 pounds of aluminum per hour, exhausting to one (1) stack identified as REV-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the allowable particulate emission rate from natural gas-fired reverberatory furnaces, ~~(~~identified as REV-1 and REV-2~~)~~ shall be limited to 5.97 and 6.52 pounds per hour, respectively.

These limits are based on the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.3.2 Particulate Matter Less Than Ten Microns (PM10) [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP) the PM-10 emissions from the two reverberatory furnaces, identified as REV-1 and REV-2 shall not exceed 5.97 and 6.52 pounds per hour, respectively (which is equivalent to 26.14 tons per year from REV-1 and 28.55 tons per year from REV-2).

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period within 180 days after issuance of this permit, in order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM and PM-10 testing on two (2) reverberatory furnaces (REV-1 and REV-2) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(e) One (1) shot blasting unit with a maximum process weight rate of 1000 pounds per hour (identified as wheelabrator), utilizing a baghouse for particulate matter control.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the shot blasting unit shall be limited to 2.57 pounds per hour. This limit is based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.4.2 Particulate Matter Less Than Ten Microns (PM10) [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP) the PM-10 emissions from the shot blast unit shall not exceed 2.57 pounds per hour, which is equivalent to 11.25 tons per year.

Compliance Determination Requirements

D.4.3 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the shot blasting unit is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.4 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the shot blast unit, at least once per shift when the shot blast unit is in operation when venting to the atmosphere. When for any one reading**,** the pressure drop across each of the baghouse is outside the normal range of 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.5 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the shot blast unit when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional

when venting indoors. All defective bags shall be replaced.

D.4.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.7 Record Keeping Requirements

(a) To document compliance with Condition D.4.4, the Permittee shall maintain the once per shift records of the inlet and outlet differential static pressure during normal operation.

(b) To document compliance with Condition D.4.5, the Permittee shall maintain records of the results of the inspections required under Condition D.4.5 and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Amcast Automotive - Gas City Plant
Source Address: 6231 East 500 South, Marion, Indiana 46953
Mailing Address: 6231 East 500 South, Marion, Indiana 46953
FESOP No.: F053-12972-00046

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Amcast Automotive - Gas City Plant
Source Address: 6231 East 500 South, Marion, Indiana 46953
Mailing Address: 6231 East 500 South, Marion, Indiana 46953
FESOP No.: F053-12972-00046

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Amcast Automotive - Gas City Plant
Source Address: 6231 East 500 South, Marion, Indiana 46953
Mailing Address: 6231 East 500 South, Marion, Indiana 46953
FESOP No.: F053-12972-00046

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Report period
Beginning: _____
Ending: _____

Boiler Affected	Alternate Fuel	Days burning alternate fuel From	To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FESOP Quarterly Report

Source Name: Amcast Automotive - Gas City Plant
Source Address: 6231 East 500 South, Marion, Indiana 46953
Mailing Address: 6231 East 500 South, Marion, Indiana 46953
FESOP No.: F053-12972-00046
Facility: Liquid paint booth (LP-1)
Parameter: Single HAP and total HAPs
Limit: The total combined usage of the worst case single HAP and total HAPs delivered to the applicators, including clean up solvents, shall be limited to less than 10 and 25 tons per 12 consecutive month period, respectively.

YEAR: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Single HAP This Month	Total HAP This Month	Single HAP Previous 11 Months	Total HAP Previous 11 Months	Single HAP 12 Month Total	Total HAP 12 Month Total
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Amcast Automotive - Gas City Plant
Source Address: 6231 East 500 South, Marion, Indiana 46953
Mailing Address: 6231 East 500 South, Marion, Indiana 46953
FESOP No.: F053-12972-00046

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked “No deviations occurred this reporting period”.
9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Federally Enforceable State Operating Permit

Source Name: Amcast Automotive **-** Gas City Plant
Source Location: 6231 East 500 South, Marion, IN 46953
County: Grant
SIC Code: 3363
Operation Permit No.: F053-12972-00046
Permit Reviewer: Adeel Yousuf / EVP

On October 17, 2001, the Office of Air Quality (OAQ) had a notice published in the Marion Chronicle Tribune, Marion, Indiana, stating that Amcast Automotive - Gas City Plant had applied for a Federally Enforceable State Operating Permit (FESOP) for the construction and operation of a stationary aluminum die cast facility. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On May 16, 2002, Gary J. Lyman, Corporate Environmental Engineer at Amcast Automotive submitted comments on the proposed FESOP. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

Comment 1

Section A.2:
1) Remove item (e) the "One shot-blasting unit with a maximum process weight rate of 3 pounds per hour etc." This source has been removed from the facility.

2) The maximum process weight for item (f) should be changed to 1000 pounds per hour.

Response 1

Item (e) under section A.2 has been removed as requested. Item (f) has been revised to reflect the correct process weight rate of 1000 pounds per hour instead of 1 pound per hour. Emission calculation spreadsheet for the shotblaster has also been updated to reflect the new emission factor provided by the source (see page 4 of 6 of ATSD Addendum, APP A (revised)).

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
This stationary source consists of the following emission units and pollution control devices:

~~(e) One (1) shot blasting unit with a maximum process weight rate of 3 pounds per hour, utilizing a baghouse for particulate matter (PM) control; and~~

(~~f~~**e**) One (1) shot blasting unit with a maximum process weight rate of ~~1~~ **1000** pound**s** per hour **(identified as wheelabrator)**, utilizing a baghouse for particulate matter (PM) control.

Section D.4 has also been revised to reflect the change in process weight rate of the shot blaster to 1000 pounds per hour and the corresponding 326 IAC 6-3-2 PM limit. Additionally, PM-10 limit has also been added for the shot blast unit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(e) One (1) shot blasting unit with a maximum process weight rate of ~~1~~ **1000** pound**s** per hour **(identified as wheelabrator)**, utilizing a baghouse for particulate matter (PM) control.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Previously, the terms "particulate" and "particulate matter" were both used in 326 IAC 6-3, but revisions were made to the rule which became effective on June 12, 2002 that included using the term "particulate" is used consistently in 326 IAC 6-3.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate ~~Matter (PM)~~ [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 **(Particulate Emission Limitations for Manufacturing Processes)**, the ~~PM~~ **particulate emission rate** from the shot blasting unit shall be limited to ~~0.05~~ **2.57** pounds per hour. This limit is based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.4.2 Particulate Matter Less Than Ten Microns (PM10) [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP) the PM-10 emissions from the shot blast unit shall not exceed 2.57 pounds per hour, which is equivalent to 11.25 tons per year.

Compliance Determination Requirements

D.4.~~2~~**3** Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the shot blasting unit is in operation.

Condition D.4.3 has been revised to clarify the facility specific events that would not qualify as a deviation. Also the typographical errors are also corrected. Condition D.4.5 has also been revised to reflect the Condition C.16 title change.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.~~3~~**4** Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses used in conjunction with the ~~grain mill line~~ **shot blast unit**, at least once per shift when the ~~grain mill line~~ **shot blast unit** is in operation when venting to the atmosphere. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise~~, **When for any one reading,** the pressure drop across each of the baghouse ~~shall be maintained within~~ **is outside** the **normal**

range of 6.0 inches of water or a range established during the latest stack test~~. The~~ **, the Permittee shall take reasonable response steps in accordance with Section C-** Compliance Response Plan **- Failure to Take Response Steps**. ~~for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~ **A pressure reading that is outside the above mentioned range is not a deviation from this permit.** Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instruments Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.~~4~~**5** Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the ~~woodworking~~ **shot blast unit** ~~operation~~ when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.4.~~5~~**6** Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Condition D.4.6 (renumbered D.4.7) has also been revised to reflect the most up to date record keeping requirements.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.~~6~~**7** Record Keeping Requirements

(a) To document compliance with Condition D.~~3.3~~**4.4**, the Permittee shall maintain the ~~following:~~ **once per shift records of the inlet and outlet differential static pressure during normal operation.**

~~(1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:~~

~~(A) Inlet and outlet differential static pressure; and~~

~~(B) Cleaning cycle operation.~~

(b) To document compliance with Condition D.~~3.4~~**4.5**, the Permittee shall maintain records of the results of the inspections required under Condition D.~~3.4~~**4.5** and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 2

Section A.3:
1) Insignificant source (i) should read twenty-eight (28) electric casting machines rather than twenty six (26).
2) Based upon the upcoming changes, we would like to add the following sources:
a) One (1) gas fired preheating oven with a maximum rating of 1.59 MMBtu/hr.
b) One (1) two zone gas fired cure oven having two burners with a maximum capacities of 4.0 MMBtu/hr and 1.5 MMBtu/hr for a maximum total capacity of 5.5 MMBtu/hr.
c) There will also be two electric IR units having a combined heat capacity of 2.4 MMBtu/hr.
d) Two (2) electric casting machines will be added, bringing the total to 30.

Response 2

Insignificant activities under section A.3 has been revised to add new emission units. Emission units (v), (w) and (x) are new emission units at the source and were not included in the FESOP application. Emission spreadsheet for combustion equipments has also been updated to include the emissions from the new added units (see page 5 of 6 of ATSD Addendum, APP A (revised))

Additionally, aluminum pouring/casting and casting cleaning/chipper operations have also been added to the insignificant activities (items y and z). Emission calculations were done previously for these operations but they were not listed in the permit under equipment description. Pouring is done only into steel molds, thus these operations emit negligible PM and PM10 emissions.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(l)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(l) ~~Twenty six~~ **Thirty** (~~26~~**30**) electric casting machines;

.....

(v) One (1) natural gas-fired preheating oven, identified as PH-1, with a maximum heat input rate of 1.59 MMBtu per hour;

(w) One (1) natural gas-fired two zone cure oven, identified as CO-1, with maximum heat input rates of 4.0 and 1.5 MMBtu per hour for a maximum total capacity of 5.5 MMBtu/hr;

(x) Two (2) electric IR units, identified as IR-1 & 2, with a combined maximum heat input rate of 2.4 MMBtu/hr.

(y) One (1) pouring/casting operation with a maximum capacity of 1.5 tons of

aluminum per hour.

(z) One (1) casting cleaning/chipper operation with a maximum capacity of 1.5 tons of aluminum per hour.

Comment 3

Pursuant to our conversation of July 15, 2002, I am attaching a letter from the Paint and Process Engineer from the referenced facility explaining the physical restrictions that limit the facility's painting capacity to 320 wheels per hour.

Letter dated July 22, 2002:
'The current restriction on throughput is our liquid paint system. It is only capable of running 320 wheels per hour. Even with the modifications to run larger diameter wheels, the throughput will stay the same. Initially we wanted to increase throughput of this operation, but when the design studies were finished, it was determined that keeping throughput same made more sense. Increasing throughput would have meant the current system would have to be removed and a new machine installed instead of simply modifying what we already have. This decision was based on size constraints inside the plant as well as the fact that the Corvette business is replacement business, not additional volume.

If we were to run the system at a faster cycle time to increase throughput, there would be multiple problems. Since this is an automated system with multiple transfers, timing is critical to the smooth operation of the equipment. Some of the transfers may not have time to complete before it would want to move again potentially causing crashes. Another factor is spray time under the automatic guns. Faster cycle time would reduce spray time therefore causing wheels with less than needed coverage. Cure time would be affected as well because shorter cycle times mean less dwell time in the ovens.'

Therefore, Amcast Automotive requests IDEM to change the wheel process capacity in this FESOP from 350 to current value of 320 wheels per hour.

Response 3

Based on the information provided by the Amcast Automotive, IDEM has determined that the current wheel processing capacity at this plant is 320 wheels per hour and the previous processing rate of 350 wheels per hour was based on the future expansion project at the source and is not valid during this time.

IDEM, OAQ has also determined that this source had potential PM10 emissions exceeding 100 tons per year in May of 1995 (equaling: PM10 = 151.13 TPY) with the issuance of CP 053-4314-00046. Thus, this source was subject to the requirements of 326 IAC 2-7 (Part 70) in 1995. This indicates that the source is subject to the Part 70 program at the existing maximum process capacity of 320 wheels per year. IDEM is reviewing this matter and will take appropriate action.

Following changes have been made to the FESOP as a result of this comment.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) natural gas-fired wash line boiler, identified as B-1, constructed in 1992, with a maximum heat input rate of 10.5 million (MM) British thermal units (Btu) per hour;

(b) One (1) liquid paint booth, identified as LP-1, using sixteen (16) LPHV air atomization guns, coating a maximum of ~~350~~ **320** aluminum wheels per hour, using dry filters for

particulate matter overspray control;

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(b) One (1) liquid paint booth, identified as LP-1, using sixteen (16) LPHV air atomization guns, coating a maximum of ~~350~~ **320** aluminum wheels per hour, using dry filters for particulate matter overspray control.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

The VOC and HAPs emissions from the liquid paint booth (LP-1) have been revised based on the process weight rate of 320 wheels per hour. Revised emission calculation sheets are attached (pages 2 & 3 of 6 of ATSD Addendum APP A (revised)).

The PM and PM10 emissions from the shot blaster have also been updated based on the correct emission factor provided by the source. Revised emission calculation sheet is attached (page 4 of 6 of ATSD Addendum APP A (revised)).

A revised summary of calculations sheet is also attached (page 1 of 6 of ATSD Addendum App A (revised)).

The following revisions have been made to the Technical Support Document under the Potential to Emit section (**bolded** language has been added, the language with a ~~line~~ through it has been deleted). The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

PM and PM10 emissions have been revised to reflect the shot blaster emissions based on the new emission factor provided by the source. Single HAP emission has been reduced to less than 10 tons per year based on the revised process weight rate of 320 wheels providing less coverage than at the previous process weight rate of 350 wheels per hour. This source had PM-10 emissions exceeding 100 tons per year in May 1995 (as described under comment 3) and the source failed to apply for FESOP before the deadline date of December 13, 1996. Thus, this source is subject to TV/FESOP program based on PM-10 emissions and not HAPs as was the case previously.

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.

S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit **(based on new information)** (tons/year)	**Potential To Emit (based on past issued approvals) (tons/year)**
PM	~~98.80~~ **74.33**	**158.27**
PM-10	~~73.47~~ **68.54**	**154.23**
SO_2	~~0.40~~ **0.43**	**0.319**
VOC	~~36.90~~ **34.54**	**33.80**
CO	~~38.29~~ **41.78**	**9.40**
NO_x	~~45.65~~ **49.81**	**46.92**

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Glycol Ethers	~~10.61~~ **9.70**
TOTAL	~~10.61~~ **9.70**

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Single HAP	HAPs
~~Aluminum Processing~~ **Reverberatory Furnace (REV-1)**	~~70.632~~ **6.13**	~~42.71~~ **26.13**	~~0.13~~ **0.00**	~~4.20~~ **1.53**	0.00	~~0.07~~ **--**	0.00	0.00
Reverberatory Furnace (REV-2)	**28.57**	**28.57**	**0.00**	**1.75**	**0.00**	**0.00**	**0.00**	**0.00**
Pouring/Casting/ Cleaning	**negl.**	**negl.**	**0.13**	**0.92**	**--**	**0.07**	**--**	**--**
Surface Coating	~~14.16~~ **12.94**	~~14.16~~ **6.04**	0.00	~~30.19~~ **27.60**	0.00	0.00	< 10	< 25

Shot Blasting	~~0.01~~ **0.01**	~~0.01~~ **negl.**	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	~~0.87~~ **0.95**	~~3.46~~ **3.78**	~~0.27~~ **0.30**	~~2.51~~ **2.74**	~~38.29~~ **41.78**	~~45.58~~ **49.74**	0.00	0.00
Total Emissions	~~85.67~~ **68.60**	~~60.34~~ **64.53**	~~0.40~~ **0.43**	~~36.90~~ **34.54**	~~38.29~~ **41.78**	~~45.65~~ **49.81**	< 10	< 25

Upon further review, the OAQ has decided to make the following changes to the FESOP Renewal. Bolded language has been added and the language with a line through it has been deleted.

1. Section D.1 (Natural gas fired boiler)

IDEM, OAQ has determined that the boiler B-1 is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c - 60.48c, Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units") because it was constructed after June 9, 1989, and has a maximum design heat input capacity greater than 10 MMBtu per hour and less than 100 MMBtu per hour. However, since this boiler only combusts natural gas, it is subject only to the record keeping and reporting requirements under 40 CFR 60.48c (a) and (g). Condition D.1.1 has been added to reflect this change. Also a new condition D.1.3 has been added for PM-10 limit for the boiler and the reporting requirement has also been revised. All the conditions are renumbered accordingly.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:
(a) One (1) natural gas-fired wash line boiler, identified as B-1, **constructed in 1992**, with a maximum heat input rate of 10.5 million (MM) British thermal units (Btu) per hour.
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart Dc]

Pursuant to the New Source Performance Standards, 326 IAC 12, and 40 CFR 60.40c through 60.48c, Subpart Dc, the Permittee is subject only to the record keeping and reporting requirements under 40 CFR 60.48c (a) and (g).

D.1.~~1~~**2** Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), the one (1) natural gas-fired wash line boiler (identified as B-1) shall be limited to 0.59 pounds PM per MMBtu. The limit is based on the following equation:

$Pt = 1.09/Q^{0.26}$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input

Q = total source max. indirect heater input = 10.5 MMBtu/hr

D.1.3 FESOP PM10 limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), PM10 shall not exceed 0.0076 pounds of PM10 per MMBtu of heat input for boiler B-1 (equivalent to 0.35 tons per year).

D.1.~~2~~**4** Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) natural gas-fired wash line boiler, identified as B-1.

~~Reporting Requirements~~ **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.1.5 Record Keeping Requirements

(a) One (1) boiler (ID # B-1), which only combusts natural gas, shall comply with the record keeping and reporting requirements under 40 CFR 60.48c (a) and (g). This source has complied with the notification requirements under 40 CFR 60.48c (a). The applicable record keeping requirements are as follows:

(1) The Permittee shall record and maintain records of the amounts of each fuel combusted during each day.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.~~3~~**6** Reporting Requirements

~~The natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

The natural gas boiler certification shall be submitted semi-annually to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

2. D.2.3 Particulate Matter (PM) [326 IAC 6-3-2]
   D.2.7 Particulate Matter (PM)
   D.2.6 HAP Emissions
   D.2.9 Record Keeping Requirements
   D.2.10 Reporting Requirements

The following updates have been made to incorporate the 326 IAC 6-3 revisions that became effective on June 12, 2002.

1. The following requirement from the previous version of 326 IAC 6-3 (Process Operations) has been approved into the SIP and will remain applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action. The following change has been made to clarify that the authority for this condition is from the SIP.

D.2.3 Particulate Matter (PM) ~~[326 IAC 6-3-2]~~ **[40 CFR 52 Subpart P]**

Pursuant to ~~326 IAC 6-3-2~~ **40 CFR 52 Subpart P**, the PM from the liquid paint booth (LP-1) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

2. Previously, the terms “particulate” and “particulate matter” were both used in the rule, but now the term “particulate is used consistently in 326 IAC 6-3. Also, the revised rule requires particulate from the surface coating to be controlled by a dry particulate filer, and operated in accordance with manufacturer’s specifications, therefore, the following changes were made to D.2.7.

D.2.7 Particulate ~~Matter (PM)~~ **[326 IAC 6-3-2(d)]**

Pursuant to [326 IAC 6-3-2(d)] and in order to comply with D.2.3, ~~T~~the dry filters for ~~PM~~ **particulate** control shall be in operation **in accordance with manufacturer’s specifications and control emissions from the liquid paint booth (LP-1)** at all times when the liquid paint booth (LP-1) is in operation.

Conditions D.2.6, D.2.9 and D.2.10 have been revised to include the correct referenced conditions.

D.2.6 HAP Emissions

Compliance with Condition D.~~1.3~~**2.2** shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.2.9 Record Keeping Requirements

(a) To document compliance with Conditions D.~~1~~**2**.2 and D.~~1~~**2**.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits in Condition D.~~1.3~~**2.2** and the VOC emission limits established in Condition D.~~1.2~~**2.1**.

(1) The amount and content of VOC and HAP for each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The volume weighted VOC and HAP content of the coatings used for each month;

(4) The cleanup solvent usage for each month;

(5) The total HAP usage for each month; and

(6) The weight of HAPs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.~~1~~**2**.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does ~~not~~ require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Condition D.2.8 has been revised to reflect the Condition C.16 title change.

D.2.8 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the liquid paint booth stack while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

3. Section D.3 (Natural gas fired reverberatory furnaces)

Previously, the terms "particulate" and "particulate matter" were both used in 326 IAC 6-3, but revisions were made to the rule which became effective on June 12, 2002 that included using the term "particulate" is

used consistently in 326 IAC 6-3.

D.3.1 Particulate ~~Matter (PM)~~ [326 IAC 6-3-2]

~~(a)~~ **Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)** ~~T~~the **allowable** particulate ~~matter (PM)~~ **emission rate** from natural gas-fired reverberatory furnace~~s~~, ~~(~~identified as REV-1 **and REV-2**~~)~~ shall be limited to 5.97 **and 6.52** pounds per hour**, respectively**.

~~(b) The particulate matter (PM) from natural gas-fired reverberatory furnace (identified as REV-2) shall be limited to 6.52 pounds per hour.~~

~~(c)~~ These limits are based on the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Condition D.3.2 is being added to add PM-10 limit for the reverberatory furnaces (REV-1 and REV-2).

D.3.2 Particulate Matter Less Than Ten Microns (PM10) [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP) the PM-10 emissions from the two reverberatory furnaces, identified as REV-1 and REV-2 shall not exceed 5.97 and 6.52 pounds per hour, respectively (which is equivalent to 26.14 tons per year from REV-1 and 28.55 tons per year from REV-2).

Condition D.1.7 (Testing Requirements) is being required to show compliance with emission limits established by 326 IAC 6-3-2 and listed under condition D.3.1.

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period within 180 days after issuance of this permit, in order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM and PM-10 testing on two (2) reverberatory furnaces (REV-1 and REV-2) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C-Performance Testing.

4. Condition C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
   Condition C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
   Condition C.5 Fugitive Dust Emissions [326 IAC 6-4]
   Condition C.7 Stack Height [326 IAC 1-7]

Conditions C.3, C.4, C.5 and C.7 were modified by removing language stating that the condition was not federally enforceable. Federal law states that failure to comply with any permit condition issued under a program that has been approved into a State Implementation Plan (SIP) is to be treated as a violation of the SIP (40 CFR 52.23). This has the effect of making all FESOP conditions federally enforceable. Indiana's FESOP program was approved as a part of Indiana's SIP at 40 CFR 52.788. Neither the program nor the

underlying rule, 326 IAC 2-8 contains provisions for designating certain conditions as not federally enforceable, therefore, the following statements with a strike out have been removed from the FESOP permit.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. ~~326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.~~

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). ~~326 IAC 6-4-2(4) is not federally enforceable.~~

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. ~~The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.~~

5. Condition B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

The IDEM, OAQ, has revised Condition B.15 Deviations from Permit Requirements and Conditions and certain Parametric Monitoring conditions in the D section of the permit to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. The Parametric Monitoring conditions have been revised to establish normal operating conditions for the emission unit or control device and to require implementation of the compliance response plan when monitoring indicates operation is outside the normal range. Language that inferred that operating outside of the normal range could be considered by itself to be a deviation was removed. B.15 was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A**

deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and ~~do~~ **does** not need to be included in this report.

The ~~notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~

~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

6. Condition C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
Condition C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

IDEM, OAQ has revised C.8 Asbestos Abatement Projects to clarify that the asbestos notification does not require a certification by the responsible official, but it does need to be certified by the owner or operator. IDEM, OAQ has revised C.17 Actions Related to Noncompliance Demonstrated by a Stack Test; a certification by the responsible official is required for the notification sent in response to non-compliance with a stack test.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do ~~not~~ require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

7. C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

The IDEM, OAQ has restructured C.15 to clarify the contents and implementation of the compliance response plan. The name of the condition has been changed to better reflect the contents of the condition. The language regarding the OAQ's discretion to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion to excuse minor incidents of missing data; however, it is not necessary to state criteria regarding the exercise of that discretion in the permit. In (c)(2) "administrative amendment" has been revised to "minor permit modification," because 326 IAC 2-7-11(a)(7) has been repealed. Requests that do not involve significant changes to monitoring, reporting, or recordkeeping requirements may now be approved as minor permit modifications.

C.16 Compliance ~~Monitoring~~ **Response** Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to **prepare** ~~implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

~~(1) This condition;~~

~~(2) The Compliance Determination Requirements in Section D of this permit;~~

~~(3) The Compliance Monitoring Requirements in Section D of this permit;~~

~~(4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~

~~(5) A~~ **a** Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. **A** CRP~~'s~~ shall be submitted to IDEM, OAQ upon request ~~and shall be subject to review and approval by IDEM, OAQ~~. The CRP shall be prepared within ninety (90) days after issuance of this permit by the **Permittee, supplemented from time to time by the Permittee,** ~~and~~ maintained on site,

and ~~is~~ comprised of:

~~(A)~~**(1)** Reasonable response steps that may be implemented in the event that ~~compliance related information indicates that~~ a response step is needed pursuant to the requirements of Section D of this permit; and **an expected timeframe for taking reasonable response steps.**

~~(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows:** ~~Failure to take reasonable response steps may constitute a violation of the permit.~~

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) ~~Upon investigation of a compliance monitoring excursion, the~~ **The** Permittee is ~~excused from taking~~ **not required to take any** further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment **and** ~~This shall be an excuse from taking further response steps providing that~~ prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

~~(d)~~**(e)** ~~Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.~~ **The Permittee shall record all instances when response steps are taken.** In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

~~(e)~~**(f)** **Except as otherwise provided by a rule or provided specifically in Section D,** all monitoring **as** required in Section D shall be performed ~~at all times~~ **when** the ~~equipment~~ **emission unit** is operating, **except for time necessary to perform quality assurance and maintenance activities**. ~~If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~

~~(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

8. Condition A.5 Prior Permit Conditions

Condition A.5 Prior Permit Conditions was removed and a new Condition Prior Permit Superseded was added to the permit to implement the intent of the new rule 326 IAC 2-1.1-9.5.

~~A.5 Prior Permit Conditions~~

~~(a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.~~

~~(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable~~

~~requirement until the permit is reissued.~~

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable Operating Permit (FESOP)

Source Background and Description

Source Name:	Amcast Automotive **-** Gas City Plant
Source Location:	6231 East 500 South, Marion, IN 46953
County:	Grant
SIC Code:	3363
Operation Permit No.:	F053-12972-00046
Permit Reviewer:	NH/EVP

The Office of Air Quality (OAQ) has reviewed an application from Amcast Automotive relating to the operation of a stationary aluminum die cast facility.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) natural gas-fired wash line boiler, identified as B-1, constructed in 1992, with a maximum heat input rate of 10.5 million (MM) British thermal units (Btu) per hour;

(b) One (1) liquid paint booth, identified as LP-1, using sixteen (16) LPHV air atomization guns, coating a maximum of 350 aluminum wheels per hour, using dry filters for particulate matter overspray control;

(c) One (1) natural gas-fired reverberatory furnace identified as REV-1, with a maximum heat input rate of 5.5 MMBtu per hour, with a maximum capacity of melting 3,500 pounds of aluminum per hour; using a natural gas-fired fume incinerator for control, exhausting to one (1) stack identified as FI;

(d) One (1) natural gas-fired reverberatory furnace identified as REV-2, with a maximum heat input rate of 10 MMBtu per hour, with a maximum capacity of melting 4,000 pounds of aluminum per hour, exhausting to one (1) stack identified as REV-2;

(e) One (1) shot blasting unit with a maximum process weight rate of 3 pounds per hour, utilizing a baghouse for particulate matter (PM) control; and

(f) One (1) shot blasting unit with a maximum process weight rate of 1 pound per hour, utilizing a baghouse for particulate matter (PM) control.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) One (1) natural gas-fired dry-off oven (clear), identified as PPDO-1, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through one (1) stack identified as PPDO-1;

(b) One (1) natural gas-fired dry-off oven (color), identified as PPDO-2, with a maximum heat input rate of 1.6 MMBtu per hour, exhausting through one (1) stack identified as PPDO-2;

(c) One (1) natural gas-fired bake oven (clear), identified as PPCO-1, with a maximum heat input rate of 3.6 MMBtu per hour, exhausting through one (1) stack identified as PPCO-1;

(d) One (1) natural gas-fired bake oven (color), identified as PPCO-2, with a maximum heat input rate of 3.6 MMBtu per hour, exhausting through one (1) stack identified as PPCO-2;

(e) One (1) natural gas-fired Pyrolysis furnace;

(f) Five (5) natural gas-fired air make-up units, identified as AMU-1 - AMU-3, AMU-5 and AMU-6, each with a maximum heat input rate of 4.125 MMBtu per hour;

(g) One (1) natural gas-fired air make-up unit, identified as AMU-4, with a maximum heat input rate of 9.9 MMBtu per hour;

(h) Two (2) natural gas-fired air make-up units, identified as AMU-7 and AMU-8, each with a maximum heat input rate of 4.9 MMBtu per hour ;

(i) One (1) natural gas-fired air make-up unit, identified as AMU-11, with a maximum heat input rate of 2.1 MMBtu per hour;

(j) One (1) natural gas-fired jet melt furnace identified as JM-1, with a maximum heat input rate of 3.2 MMBtu per hour;

(k) Two (2) natural gas-fired filter furnaces identified as FF-1 and FF-2, each with a maximum heat input rate of 2.0 MMBtu per hour;

(l) Twenty six (26) electric casting machines;

(m) One (1) natural gas-fired material preheat oven, identified as PO-1, with a maximum heat input rate of 1.2 MMBtu per hour;

(n) One (1) natural gas-fired heat treat in line oven, identified as HT-1, with a maximum heat input rate of 4.6 MMBtu per hour, exhausting to one (1) stack identified as HT-1;

(o) Two (2) natural gas-fired age oven in line, identified as AO-1 and AO-2, each with a maximum heat input rate of 1.0 MMBtu per hour, exhausting to one (1) stack identified as AO-1;

(p) One (1) natural gas-fired caustic tank heater, identified as CT-1, with a maximum heat input rate of 0.4 MMBtu per hour, and exhausting to one (1) stack identified as CT-1;

(q) Three (3) natural gas-fired drop bottom heat treat oven, identified as #2 - #4, each with a maximum heat input rate of 7.5 MMBtu per hour;

(r) Ten (10) natural gas-fired HVAC units, identified as #1 - #10, with a combined maximum heat input rate of 0.125 MMBtu per hour;

(s) One (1) die prep oven, with a maximum heat input rate of 0.8 MMBtu per hour;

(t) One (1) hot cyclone chip dryer, identified as HC-1, with a maximum heat input rate of 0.5 MMBtu per hour, exhausting to one (1) stack identified as HC-1; and

(u) Four heat treat quench tank heaters, identified as QTH1-4, each with a maximum heat input rate of 1.2 MMBtu per hour.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) CP 053-2199-00043, issued on January 8, 1992;

(b) Exemption 053-3281-00046, issued on December 29, 1993;

(c) Registration 053-3448-00046, issued on April 6, 1994;

(d) CP 053-4314-00046, issued on May 12, 1995;

(e) Exemption 053-6284-00046, issued on September 25, 1996;

(f) Registration 053-8589-00046, issued on July 25, 1997; and

(g) Exemption 053-10566-00046, issued on March 5, 1999.

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on June 26, 1998. Additional information was received on November 21, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 6).

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical

or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	98.80
PM-10	73.47
SO_2	0.40
VOC	36.90
CO	38.29
NO_x	45.65

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Glycol Ethers	10.61
TOTAL	10.61

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Single HAP	HAPs
Aluminum Processing	70.63	42.71	0.13	4.20	0.00	0.07	0.00	0.00
Surface Coating	14.16	14.16	0.00	30.19	0.00	0.00	< 10	< 25

Shot Blasting	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.87	3.46	0.27	2.51	38.29	45.58	0.00	0.00
Total Emissions	85.67	60.34	0.40	36.90	38.29	45.65	< 10	< 25

County Attainment Status

The source is located in Grant County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Grant County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) The one (1) natural gas fired boiler, identified as B-1, rated at 10.5 MMBtu/hr, is subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc). There are no limits or requirements because the boiler uses only natural gas.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Grant County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM10 is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP).

Pursuant to this rule, the material usage at the liquid paint booth (LP-1) will be limited such that the source-wide single HAP and total HAPs emissions will be limited to less than 10 and 25 tons/yr, respectively. Therefore, the requirements of 326 IAC 2-7 do not apply.

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The liquid paint booth (LP-1) is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because the source has limited single HAP emissions to less than 10 tons per year and total HAP emissions to less than 25 tons per year.

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units constructed after September 21, 1983 shall be limited by the following equation:

$Pt = 1.09/Q^{0.26}$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 10.5 MMBtu/hr

$Pt = 1.09/10.5^{0.26} = 0.59$ lbs PM/MMBtu

Therefore, the PM emissions from the one (1) boiler (constructed in 1992), rated at 10.5 MMBtu per hour heat input shall be limited to 0.59 pounds per MMBtu heat input. The one (1) boiler will be in compliance with this rule.

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter (PM) from the one (1) liquid paint booth (LP-1) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times that the one (1) liquid paint booth (LP-1) is in operation, in order to comply with this limit.

(b) The particulate matter (PM) from the shot blasting unit shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

$E = 4.10\ (0.0015)^{0.67} = 0.05$ lbs PM/hr

Based on the above equation, particulate matter emissions from the shot blasting unit shall be limited to 0.05 pounds per hour for a maximum process rate of 3 pounds per hour.

Compliance calculation:
Uncontrolled PM emissions =
(13.14 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 3.0 lbs PM/hr

Controlled Compliance calculation:
(0.01 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 0.00 lbs PM/hr

The shot blasting unit will comply with the requirements of 326 IAC 6-3-2 by using a baghouse to control PM emissions.

(c) The particulate matter (PM) from natural gas-fired reverberatory furnace (identified as REV-1) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

$E = 4.10\ (1.75)^{0.67} = 5.97$ lbs PM/hr

Based on the above equation, particulate matter emissions from the natural gas-fired reverberatory furnace (identified as REV-1) shall be limited to 5.97 pounds per hour for a maximum process rate of 3500 pounds per hour.

Compliance calculation:
Uncontrolled PM emissions =
(32.96 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 7.53 lbs PM/hr

The natural gas-fired reverberatory furnace (REV-1) will comply with the requirements of 326 IAC 6-3-2 by using a fume incinerator to control PM emissions.

(d) The particulate matter (PM) from natural gas-fired reverberatory furnace (identified as REV-2) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

$E = 4.10\ (2.0)^{0.67} = 6.52$ lbs PM/hr

Based on the above equation, particulate matter emissions from the natural gas-fired reverberatory furnace (identified as REV-2) shall be limited to 6.52 pounds per hour for a maximum process rate of 4000 pounds per hour.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to CP 053-4314-00046, issued on May 12, 1995, the volatile organic compound (VOC) content of coating delivered to the applicator at the liquid paint booth (LP-1) shall be limited to 3.5 pounds of VOCs per gallong of coating less water, for forced warm air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The liquid paint booth (LP-1) has applicable compliance monitoring conditions as specified below:

   (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the liquid paint booth stack while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

   (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit

These monitoring conditions are necessary because the dry filters for the liquid paint booth (LP-1) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

2. The shot blasting unit has applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the shot blasting unit shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

   (b) The Permittee shall record the total static pressure drop and flow rate across the baghouse controlling the shot blasting unit, at least once per shift when the shot blasting unit is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 6.0 inches of water or a pressure drop range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading or flow rate is outside of the above mentioned range for any one reading.

   These monitoring conditions are necessary because the baghouse for the shot blasting unit must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

3. The one (1) natural gas-fired wash line boiler, identified as B-1, has applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the boiler stack exhaust shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance

Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the one (1) natural gas-fired wash line boiler, identified as B-1, must operate properly to ensure compliance with 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this stationary aluminum die cast facility shall be subject to the conditions of the attached proposed **FESOP No.: F053-12972-00046.**

Appendix A: Emission Calculations

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: NH/EVP

Uncontrolled Potential Emissions (tons/year)

Pollutant	Emissions Generating Activity: Aluminum	Surface Coating	Shot Blasting	Natural Gas Combustion	**TOTAL**
PM	70.63	14.16	13.14	0.87	98.80
PM10	42.71	14.16	13.14	3.46	73.47
SO2	0.13	0.00	0.00	0.27	0.40
NOx	0.07	0.00	0.00	45.58	45.65
VOC	4.20	30.19	0.00	2.51	36.90
CO	0.00	0.00	0.00	38.29	38.29
total HAPs	0.00	10.61	0.00	0.00	10.61
worst case single HAP	0.00	10.61	0.00	0.00	10.61

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

Pollutant	Emissions Generating Activity: Aluminum	Surface Coating	Shot Blasting	Natural Gas Combustion	**TOTAL**
PM	70.63	14.16	0.01	0.87	85.67
PM10	42.71	14.16	0.01	3.46	60.34
SO2	0.13	0.00	0.00	0.27	0.40
NOx	0.07	0.00	0.00	45.58	45.65
VOC	4.20	30.19	0.00	2.51	36.90
CO	0.00	0.00	0.00	38.29	38.29
total HAPs	0.00	9.90	0.00	0.00	9.90
worst case single HAP	0.00	9.90	0.00	0.00	9.90

Total emissions based on rated capacity at 8,760 hours/year, after control.

Appendix A: Emissions Calculations
Aluminum

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: NH/EVP

SCC# 3-04-001-03
Reverberatory Furnaces (REV-1 and REV-2)

TYPE OF MATERIAL		Throughput LBS/HR	1 TON/2000 lbs	TON/HR		
Aluminum		7500	2000	3.75		
	PM * lbs/ton Produced	**PM10 * lbs/ton Produced**	**SOx lbs/ton Produced**	**NOx lbs/ton Produced**	**VOC * lbs/ton Produced**	**CO lbs/tons Produced**
	4.3	2.6	–	–	0.2	–
Potential Emissions lbs/hr	16.13	9.75	–	–	0.75	–
Potential Emissions lbs/day	387.00	234.00	–	–	18.00	–
Potential Emissions tons/year	70.63	42.71	–	–	3.29	–

SCC# 3-04-001-14
Pouring/Casting

TYPE OF MATERIAL		Throughput LBS/HR	1 TON/2000 lbs	TON/HR		
Aluminum		3000	2000	1.5		
	PM lbs/ton metal charged	**PM10 lbs/ton metal charged**	**SOx * lbs/ton metal charged**	**NOx * lbs/ton metal charged**	**VOC * lbs/ton metal charged**	**CO lbs/tons metal charged**
	–	–	0.02	0.01	0.14	–
Potential Emissions lbs/hr	–	–	0.03	0.02	0.210	–
Potential Emissions lbs/day	–	–	0.72	0.36	5.040	–
Potential Emissions tons/year	–	–	0.13	0.07	0.92	–

SCC# 3-04-003-42
Casting Cleaning/Chippers

TYPE OF MATERIAL		Throughput LBS/HR	1 TON/2000 lbs	TON/HR		
Aluminum		3000	2000	1.5		
	PM * lbs/ton metal produced	**PM10 * lbs/ton metal produced**	**SOx lbs/ton metal produced**	**NOx lbs/ton metal produced**	**VOC lbs/ton metal produced**	**CO lbs/tons metal produced**
	–	–	0.00	0.00	0.00	–
Potential Emissions lbs/hr	–	–	0.00	0.00	0.000	–
Potential Emissions lbs/day	–	–	0.00	0.00	0.000	–
Potential Emissions tons/year	–	–	0.00	0.00	0.00	–

	PM	**PM10**	**SOx**	**NOx**	**VOC**	**CO**
Total Potential Emissions tons/yr	**70.63**	**42.71**	**0.13**	**0.07**	**4.20**	–

* Note: Emission factor is from FIRE version 6.22

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: NH/EVP

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Sparkle Silver WPB-3813-1	8.9	66.80%	49.1%	17.7%	52.3%	26.60%	0.01250	350.000	3.30	1.58	6.89	165.41	30.19	14.16	5.92	75%
State Potential Emissions			**Add worst case coating to all solvents**								**6.89**	**165.41**	**30.19**	**14.16**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP#: 053-12972
Plt ID: 053-00046
Permit Reviewer: NH/EVP

350	wheels/hr x	0.87	oz/wheel x	0.0068	gal/oz x	1.17	lbs/gal x	8760	hrs/yr /	2000	lbs/ton
		HAP*	=	10.61	tons/yr						

*HAP is glycol ether

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: NH/EVP

Steel Shot Blasting

PM/PM10:	3	lbs/hr *	8760	hrs/yr /	2000	lbs/ton =	**13.14**	**tons/yr (uncontrolled)**
where the baghouse control efficiency is listed at			99.90%				**0.01**	**tons/yr (controlled)**

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR >100

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: NH/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
104.075	911.7

Facilities	**MMBtu/hr**
Wash Line Boiler (B-1)	10.5
Dry-Off Oven - clear (PPDO-1)	1.6
Dry-Off Oven - color (PPDO-2)	1.6
Bake Oven - clear (PPCO-01)	3.6
Bake Oven - color (PPCO-02)	3.6
Pyrolysis Furnace	0.3
Air Make-up Units (#1-3, 5-6)	20.625
Air Make-up Unit (#4)	9.9
Air Make-up Units (#7-8)	9.8
Jet Melt Furnace (JM-1)	3.2
Filter Furnaces (FF-1 and FF-2)	4
Material Preheat Oven (PO-1)	1.2
Heat Treat In Line Oven (HT-1)	4.6
Age Oven In Line (AO-1)	1
Caustic Tank Heater (CT-1)	0.4
Drop Bottom Heat Treat Ovens (#2-4)	22.5
HVAC (#1-10)	1.25
HVAC Paint Line (#11)	2.1
Heat Treat Age Oven (A-02)	1
Die Prep Oven	0.8
Hot Cyclone Chip Dryer (HC-1)	0.5
Total	**104.075**

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.87	3.46	0.27	45.58	2.51	38.29

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A (Revised): Emission Calculations

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: AY/EVP

Uncontrolled Potential Emissions (tons/year)

Pollutant	Emissions Generating Activity: Aluminum	Surface Coating	Shot Blasting	Natural Gas Combustion	**TOTAL**
PM	54.70	12.94	5.74	0.95	74.33
PM10	54.70	6.04	4.02	3.78	68.54
SO2	0.13	0.00	0.00	0.30	0.43
NOx	0.07	0.00	0.00	49.74	49.81
VOC	4.20	27.60	0.00	2.74	34.54
CO	0.00	0.00	0.00	41.78	41.78
total HAPs	0.00	9.70	0.00	0.00	9.70
worst case single HAP	0.00	9.70	0.00	0.00	9.70

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

Pollutant	Emissions Generating Activity: Aluminum	Surface Coating	Shot Blasting	Natural Gas Combustion	**TOTAL**
PM	54.70	12.94	0.01	0.95	68.60
PM10	54.70	6.04	0.00	3.78	64.53
SO2	0.13	0.00	0.00	0.30	0.43
NOx	0.07	0.00	0.00	49.74	49.81
VOC	4.20	27.60	0.00	2.74	34.54
CO	0.00	0.00	0.00	41.78	41.78
total HAPs	0.00	9.70	0.00	0.00	9.70
worst case single HAP	0.00	9.70	0.00	0.00	9.70

Total emissions based on rated capacity at 8,760 hours/year, after control.

Appendix A (Revised): Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: AY/EVP

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Sparkle Silver WPB-3813-1	8.9	66.80%	49.1%	17.7%	52.3%	26.60%	0.01250	320.000	3.30	1.58	6.30	151.23	27.60	12.94	5.92	75%
State Potential Emissions			**Add worst case coating to all solvents**								**6.30**	**151.23**	**27.60**	**12.94**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A (Revised): Emission Calculations

HAP Emission Calculations

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP#: 053-12972
Plt ID: 053-00046
Permit Reviewer: AY/EVP

320	wheels/hr x	0.87	oz/wheel x	0.0068	gal/oz x	1.17	lbs/gal x	8760	hrs/yr /	2000	lbs/ton
		HAP*	=	9.70	tons/yr						

*HAP is glycol ether

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: AY/EVP

Steel Shot Blasting

PM:	1.31	lbs/hr *	8760	hrs/yr /	2000	lbs/ton =	**5.74**	**tons/yr (uncontrolled)**
where the baghouse control efficiency is listed at			99.90%				**0.01**	**tons/yr (controlled)**
PM10**:							**4.02**	**tons/yr (uncontrolled)**
							0.004	**tons/yr (controlled)**

* Emission factor of 1.31 lbs/hr is provided by the manufacturer of the BCP Shotblast unit.
** PM10 emissions consist of 70% of total PM emissions based on Registration 053-3448-00046, issued on April 6, 1994.

Appendix A (Revised): Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR >100

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
Plt ID: 053-00046
Reviewer: AY/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
113.565	994.8

Facilities	**MMBtu/hr**
Wash Line Boiler (B-1)	10.5
Dry-Off Oven - clear (PPDO-1)	1.6
Dry-Off Oven - color (PPDO-2)	1.6
Bake Oven - clear (PPCO-01)	3.6
Bake Oven - color (PPCO-02)	3.6
Pyrolysis Furnace	0.3
Air Make-up Units (#1-3, 5-6)	20.625
Air Make-up Unit (#4)	9.9
Air Make-up Units (#7-8)	9.8
Jet Melt Furnace (JM-1)	3.2
Filter Furnaces (FF-1 and FF-2)	4
Material Preheat Oven (PO-1)	1.2
Heat Treat In Line Oven (HT-1)	4.6
Age Oven In Line (AO-1)	1
Caustic Tank Heater (CT-1)	0.4
Drop Bottom Heat Treat Ovens (#2-4)	22.5
HVAC (#1-10)	1.25
HVAC Paint Line (#11)	2.1
Heat Treat Age Oven (A-02)	1
Die Prep Oven	0.8
Hot Cyclone Chip Dryer (HC-1)	0.5
Preheating oven (PH-1)	1.59
Two zone cure oven (CO-1)	5.5
Two electric IR units (IR-1 & IR-2)	2.4
Total	**113.565**

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.95	3.78	0.30	49.74	2.74	41.78

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
(SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Appendix A (Revised): Emissions Calculations
Aluminum

Company Name: Amcast Automotive
Address City IN Zip: 6231 East 500 South, Marion, IN 46953
FESOP: 053-12972
PIt ID: 053-00046
Reviewer: AY/EVP

Reverberatory Furnaces (REV-1 and REV-2)
TYPE OF MATERIAL

Aluminum	Throughput LBS/HR	1 TON/2000 lbs	TON/HR	E (lb/hr)
REV-1	3500	2000	1.75	**5.97**
REV-2	4000	2000	2.00	**6.52**

(a) PM and PM10 emissions from the REV-1 and REV-2 are calculated using 326 IAC 6-3-2 equation **E = 4.10 x P^0.67** Where: E = Rate of emission in pounds per hour and
The source will conduct stack test to show compliance with the 326 IAC 6-3-2 PM emission limit. P = Process weight rate in tons per hour

REV-1

	PM lbs/ton Produced	**PM10 ** lbs/ton Produced**	**SOx lbs/ton Produced**	**NOx lbs/ton Produced**	**VOC * lbs/ton Produced**	**CO lbs/tons Produced**
	(a)	(a)	–	–	0.2	–
Potential Emissions lbs/hr	5.97	5.97	–	–	0.35	–
Potential Emissions lbs/day	143.16	143.16	–	–	8.40	–
Potential Emissions tons/year	26.13	26.13	–	–	1.53	–

REV-2

	PM * lbs/ton Produced	**PM10 * lbs/ton Produced**	**SOx lbs/ton Produced**	**NOx lbs/ton Produced**	**VOC * lbs/ton Produced**	**CO lbs/tons Produced**
	*	*	–	–	0.2	–
Potential Emissions lbs/hr	6.52	6.52	–	–	0.40	–
Potential Emissions lbs/day	156.56	156.56	–	–	9.60	–
Potential Emissions tons/year	28.57	28.57	–	–	1.75	–

** PM10 emissions are assumed to be equal to PM emissions based on 326 IAC 6-3-2 equation.

SCC# 3-04-001-14
Pouring/Casting

TYPE OF MATERIAL		Throughput LBS/HR	1 TON/2000 lbs	TON/HR		
Aluminum		3000	2000	1.5		
	PM lbs/ton metal charged	**PM10 lbs/ton metal charged**	**SOx * lbs/ton metal charged**	**NOx * lbs/ton metal charged**	**VOC * lbs/ton metal charged**	**CO lbs/tons metal charged**
	0.00	0.00	0.02	0.01	0.14	–
Potential Emissions lbs/hr	0.00	0.00	0.03	0.02	0.210	–
Potential Emissions lbs/day	0.00	0.00	0.72	0.36	5.040	–
Potential Emissions tons/year	0.00	0.00	0.13	0.07	0.92	–

	PM	**PM10**	**SOx**	**NOx**	**VOC**	**CO**
Total Potential Emissions tons/yr	**54.70**	**54.70**	**0.13**	**0.07**	**4.20**	–

* Note: Emission factor is from FIRE version 6.22